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Notice of Allowability	Application No.	Applicant(s)	
	10/811,912	FINK ET AL.	
	Examiner	Art Unit	
	Rodney G. McDonald	1753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *Amendment filed November 20, 2006*.

2. ☒ The allowed claim(s) is/are *1-47*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

RODNEY G. MCDONALD
PRIMARY EXAMINER

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance:

Claims 1-19 are allowable over the prior art of record because the prior art of record does not teach the claimed subject matter including a honeycomb structure comprising plural adjacent corrugated sheets attached together to form a plurality of adjacent cells in spaces between the adjacent corrugated sheets, the cells configured to allow optical viewing through the honey comb structure, each cell having an aspect ratio of length to diameter sufficient to impede a processing plasma from traveling through the full length of the cell.

Claim 20 is allowable over the prior art of record because the prior art of record does not teach because the prior art of record does not teach the claimed subject matter including a clip device configured to hold opposing ends of the honeycomb planar sheet together to form a substantially continuous liner of honeycomb material configured to line a chamber wall of a plasma processing chamber.

Claims 21-39 are allowable over the prior art of record because the prior art of record does not teach the claimed subject matter including a honeycomb structure having-comprising plural adjacent corrugated sheets attached together to form a plurality of adjacent cells in spaces between the adjacent corrugated sheets, the cells configured to allow optical viewing through the honeycomb structure, each cell having an aspect ratio of length to diameter sufficient to impede a processing plasma from traveling through the full length of the cell, and a coupling device configured to couple

the honeycomb structure to the backing plate such that the honeycomb structure is aligned with at least a portion of the through hole in the backing plate.

Claim 40 is allowable over the prior art of record because the prior art of record does not teach the claimed subject matter including means for impeding processing plasma from traveling into contact with a viewing window of a plasma chamber and for allowing viewing through cells formed between attached adjacent corrugated sheets; and means for holding the means for impeding within an opening of a chamber liner used in the plasma chamber.

Claim 41 is allowable over the prior art of record because the prior art of record does not teach the claimed subject matter including fixedly mounting a honeycomb structure within the mounting hole, said honeycomb structure having comprising plural adjacent corrugated sheets attached together to form a plurality of adjacent cells in spaces between the adjacent corrugated sheets, the cells configured to allow optical viewing through the honeycomb structure, each cell having an aspect ratio of length to diameter sufficient to impede a processing plasma from traveling through the full length of the cell.

Claim 42 is allowable over the prior art of record because the prior art of record does not teach the claimed subject matter including a honeycomb structure comprising a plurality of adjacent cells configured to allow optical viewing through the honeycomb structure, each cell having an aspect ratio of length to diameter sufficient to impede a processing plasma from traveling through the full length of the cell; and a coupling device configured to couple the honeycomb structure to the backing plate such that the

honeycomb structure is aligned with at least a portion of the through hole in the backing plate and comprising a retaining flange that is detachably coupled to the backing plate by press contact when the backing plate is coupled to a chamber liner.

Claims 43 and 44 are allowable over the prior art of record because the prior art of record does not teach the claimed subject matter including a honeycomb structure comprising a plurality of adjacent cells configured to allow optical viewing through the honeycomb structure, each cell having an aspect ratio of length to diameter sufficient to impede a processing plasma from traveling through the full length of the cell; and a coupling device configured to couple the honeycomb structure to the backing plate such that the honeycomb structure is aligned with at least a portion of the through hole in the backing plate and comprising at least one retaining pin fixed to the backing plate and configured to engage at least one cell of the honeycomb structure when the honeycomb structure is pressed over the at least one retaining pin.

Claim 45 is allowable over the prior art of record because the prior art of record does not teach a honeycomb structure comprising a plurality of adjacent cells configured to allow optical viewing through the honeycomb structure, each cell having an aspect ratio of length to diameter sufficient to impede a processing plasma from traveling through the full length of the cell, and a coupling device configured to couple the honeycomb structure to the backing plate such that the honeycomb structure is aligned with at least a portion of the through hole in the backing plate and comprising a retaining flange that is detachably coupled to the backing plate by press contact when the backing plate is coupled to the chamber liner.

Claims 46 and 47 are allowable over the prior art of record because the prior art of record does not teach a honeycomb structure comprising a plurality of adjacent cells configured to allow optical viewing through the honeycomb structure, each cell having an aspect ratio of length to diameter sufficient to impede a processing plasma from traveling through the full length of the cell, and a coupling device configured to couple the honeycomb structure to the backing plate such that the honeycomb structure is aligned with at least a portion of the through hole in the backing plate and comprising at least one retaining pin fixed to the backing plate and configured to engage at least one cell of the honeycomb structure when the honeycomb structure is pressed over the at least one retaining pin.

The closest prior art of record to Saito (Japan 2000-0773951) teach an optical deposition shield with a plurality of holes. The shield however does not comprise a honeycomb structure comprising plural adjacent corrugated sheets attached together to form a plurality of adjacent cells in spaces between the adjacent corrugated sheets as required by Applicant's claims 1-19, 21-39 and 41. Nor does Saito '951 teach a honeycomb structure planar sheet having a plurality of adjacent cells and a clip device configured to hold opposing ends of the honey comb planar sheet together as required by Applicant's claim 20. Nor does Saito '951 teach means for impeding processing plasma from traveling into contact with a viewing window of a plasma chamber and for allowing viewing through cells formed between attached adjacent corrugated sheets as required by Applicant's claim 40. Nor does Saito '951 teach the coupling means for the honeycomb structure as required by Applicant's claims 42-47.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney G. McDonald whose telephone number is 571-272-1340. The examiner can normally be reached on M- Th with Every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam X. Nguyen can be reached on 571-272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Rodney G. McDonald
Primary Examiner
Art Unit 1753

RM
February 13, 2007